DERIVATA DI FUNZIONE COMPOSTA

FUNZIONE	DERIVATA	FUNZIONE COMPOSTA	DERIVATA DI FUNZIONE COMPOSTA
$y = x^n$	$y' = n \cdot x^{n-1}$	$y = [f(x)]^n$	$y' = n \cdot [f(x)]^{n-1} \cdot f'(x)$
$y = \sqrt{x}$	$y' = \frac{1}{2\sqrt{x}}$	$y = \sqrt{f(x)}$	$y' = \frac{1}{2\sqrt{f(x)}} \cdot f'(x)$
$y = a^x$	$y' = a^x \cdot \log a$	$y = a^{f(x)}$	$y' = a^{f(x)} \cdot \log a \cdot f'(x)$
$y = e^x$	$y' = e^x$	$y = e^{f(x)}$	$y' = e^{f(x)} \cdot f'(x)$
$y = \log_a x$	$y' = \frac{1}{x} \cdot \log_a e$	$y = \log_a f(x)$	$y' = \frac{1}{f(x)} \cdot \log_a e \cdot f'(x)$
$y = \log x$	$y' = \frac{1}{x}$	$y = \log f(x)$	$y' = \frac{1}{f(x)} \cdot f'(x)$
$y = \operatorname{sen} x$	$y' = \cos x$	$y = \operatorname{sen} f(x)$	$y' = \cos f(x) \cdot f'(x)$
$y = \cos x$	$y' = -\operatorname{sen} x$	$y = \cos f(x)$	$y' = -\operatorname{sen} f(x) \cdot f'(x)$

$y = \operatorname{tg} x$	$y' = \dfrac{1}{\cos^2 x} = 1 + \operatorname{tg}^2 x$	$y = \operatorname{tg} f(x)$	$y' = \dfrac{1}{\cos^2 f(x)} \cdot f'(x)$ $y' = [1 + \operatorname{tg}^2 f(x)] \cdot f'(x)$
$y = \operatorname{cotg} x$	$y' = -\dfrac{1}{\operatorname{sen}^2 x} = -(1 + \operatorname{cotg}^2 x)$	$y = \operatorname{cotg} f(x)$	$y' = -\dfrac{1}{\operatorname{sen}^2 f(x)} \cdot f'(x)$ $y' = -[1 + \operatorname{cotg}^2 f(x)] \cdot f'(x)$
$y = \operatorname{arc\,sen} x$	$y' = \dfrac{1}{\sqrt{1 - x^2}}$	$y = \operatorname{arc\,sen} f(x)$	$y' = \dfrac{1}{\sqrt{1 - [f(x)]^2}} \cdot f'(x)$
$y = \operatorname{arc\,cos} x$	$y' = -\dfrac{1}{\sqrt{1 - x^2}}$	$y = \operatorname{arc\,cos} f(x)$	$y' = -\dfrac{1}{\sqrt{1 - [f(x)]^2}} \cdot f'(x)$
$y = \operatorname{arc\,tg} x$	$y' = \dfrac{1}{1 + x^2}$	$y = \operatorname{arc\,tg} f(x)$	$y' = \dfrac{1}{1 + [f(x)]^2} \cdot f'(x)$
$y = \operatorname{arc\,cotg} x$	$y' = -\dfrac{1}{1 + x^2}$	$y = \operatorname{arc\,cotg} f(x)$	$y' = -\dfrac{1}{1 + [f(x)]^2} \cdot f'(x)$